

**Notice of Allowability**

Application No.

10/776,901

Applicant(s)

HENG ET AL.

Examiner

Nghia M. Doan

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Application filed on 02/10/04 and RCE filed on 01/04/07.
2. ☐ The allowed claim(s) is/are 1,3,6,8,11 and 13.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20070208.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20070208.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
JACK CHIANG  
SUPERVISORY PATENT EXAMINER

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/04/2007 has been entered.
2. Applicant Amended filed on 11/16/2006 has been examined. Claims 1, 3-6, 8-11, and 13-15 remain pending. Claims 1, 4, 6, 9, 11, and 14 have been amended. Claims 2, 7 and 12 have been canceled.

### ***Drawings***

3. The proposed drawing correction filed on 02/08/2007 have been approved by the examiner. The New corrected drawings in compliance with 37 CFR 1.121(d) are required. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### **EXAMINER'S AMENDMENT**

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided

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by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Steven Fischman Reg. 34,594 on 02/07/2007.

Application is amended as the following:

As per claim 1:

line 8, after "circuit features;" inserts

"wherein said allowable positions of said edges are shiftable within a range in which a variation of image intensity at sidewalls of the image is approximately linear or quadratic in nature;

wherein said allowable shifts in the edges are implemented in parallel with trust region constraints on edge positions to effect said circuit layout optimization;"

line 11, before "intensities" inserts "said".

As per claim 6:

line 8, after "circuit features;" inserts

"wherein said allowable positions of said edges are shiftable within a range in which a variation of image intensity at sidewalls of the image is approximately linear or quadratic in nature;

wherein said allowable shifts in the edges are implemented in parallel with trust region constraints on edge positions to effect said circuit layout optimization;"

line 11, before "intensities" inserts "said".

As per claim 11:

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line 9, after "circuit features;" inserts

"wherein said allowable positions of said edges are shiftable within a range in which a variation of image intensity at sidewalls of the image is approximately linear or quadratic in nature;

wherein said allowable shifts in the edges are implemented in parallel with trust region constraints on edge positions to effect said circuit layout optimization;"

line 12, before "intensities" inserts "said".

As per claims 4, 5, 9, 10, 14, and 15: are canceled

***Allowable Subject Matter***

5. Claims 1, 3, 6, 8, 11, and 13 are allowed.

6. The following is an examiner's statement of reasons for allowance: the prior art made of record does not teach or suggest the inventive step comprising: a set of linked constraint on allowance positions for the edges are shiftable within a range in which a variation of image intensity at sidewalls is approximately linear or quadratic in nature that implemented in parallel with trust region constraints on edge position to effect said circuit layout optimization.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghia M. Doan whose telephone number is 571-272-5973. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghia M. Doan  
Patent Examiner  
AU 2825  
NMD

  
JACK CHIANG  
SUPERVISORY PATENT EXAMINER

## Replacement Sheet

3/5  
END920030090U51

FIG. 3

